

REMARKS

Claim 15 has been amended, and claims 29-31 are added. Claims 15-23 and 25-31 are pending, of which claims 15 and 29 are independent claims.

In the Office Action, the rejection under 35 U.S.C. § 103(a) based on the combination of the Forrester (US 6,281,477), Barnett (US 2,021,458), and Kochman (US 6,563,094) references is maintained. This rejection is respectfully traversed with respect to the claims as amended herein

It is initially noted that the "Barnett" reference should really be referred to as the "Macy" reference, as the inventor's name is Barnett W. Macy. However, in the interest of avoiding confusion in these proceedings, Applicant will mirror the Examiner's use of "Barnett" in reference to US 2,021,458.

The office action states that Applicant's arguments filed on October 29, 2009 do not reflect the actual language of the claims. To address this objection, independent claim 15 is amended to read as follows: "A heater bag for bakery products made using a flour-based dough, the bag being suitable for us in complete safety for quickly warming bakery products until a temperature between 36°C and 44°C starting from a lower ambient temperature while fully conserving the quality and the integrity of these products and simultaneously improving their flavour, the bag comprising..."

As previously described, the independent claims are directed to a heater bag which includes at least one semi-flexible heater plate having an electrical heater element and inserted in a pocket of natural material comprising cotton, flax, and wool, the pocket constituting a portion of the bottom, of the side walls, or of the means for closing the bag, and wherein, for each heater plate, the heating power per cm² lies in the range of 0.13 W to 0.24 W. The heater bag aims at quickly warming bakery products which are initially at an ambient temperature.

Forrester relates to a device for maintaining the temperature or slowing down the temperature decline of an already warm product (such as pizza taken

out from an oven). This difference between such a device and a heater bag according to claim 15 is essential.

As has been acknowledged by the Examiner, Forrester does not disclose that the pocket plate is made of natural material comprising cotton, flax and wool. Forrester discloses materials such as nylon and polyester which are artificial materials that would systematically fuse or burn at the high temperatures induced by the power density required for a heating process aiming at raising the temperature of a bakery product from a low ambient temperature. The use of artificial materials in the bag of Forrester is not problematic due to its intended use, which is merely to maintain a temperature of an item (e.g. a pizza) that was heated by a separate means (e.g. an oven). Forrester does not require sufficiently high power densities or attendant temperatures associated with heating a product up from a lower ambient temperature.

More specifically, in order to be able to quickly raise the temperature of a bakery product from an ambient temperature to a higher temperature between 36°C and 44°C, the temperature at the flexible heater plate of the claimed heating bag is necessarily still higher. As specifically recited in the claims, the heating power per cm² lies in the range of 0.13 W to 0.24 W, and in practice this corresponds to a temperature at the heating plate which is greater than 100°C and even as high as 150°C. The device described in Forrester includes materials (such as nylon and polyester) which would not withstand such a high temperature, and thus the person skilled in the art would not be tempted to use a device such as described by Forrester for quickly heating a bakery product originally at an ambient temperature to a higher temperature in the range 36°C - 44°C.

Forrester thus fails to disclose the full combination of features recited in claim 15 and furthermore relates to a device having another purpose than the heating bag according to the present invention.

It is further noted that Forrester teaches the use of vapor-permeable materials (such as nylon) to allow substantial vapor/humidity to escape from the

interior of the container, to avoid problems associated with excessive humidity such as a wet container, soggy product, mildew, odor etc. (col. 5 lines 40-54; col. 10 lines 1-6; col. 7 lines 1-13). The aim in Forrester is not to accumulate moisture and maintain it near the heated item, but rather to promote easy escape of moisture to the surrounding environment to prevent the aforementioned problems.

Kochman teaches a soft and flexible electric heater employing electrically conductive threads or fibers formed into heating cables, which can be further arranged into a variety of configurations for different uses. Column 11, referred to in the Office Action, describes an example using four heating cables which can provide an output power of about 330 W. While it is readily acknowledged that one skilled in the art could use this teaching to create a three-cable heater for a power of about 250 W, this fact is not seen to be at all relevant to claim 15. This example in Kochman provides no teaching regarding power density, only about total power, and thus there is no teaching regarding a heating power per cm² in the range of 0.13 W to 0.24 W. And of course this example also is completely disconnected from any particular application, let alone to the application of quickly heating bakery products in a heating bag. Kochman really provides no teaching that is at all relevant to the presently claimed invention. Like Forrester, Kochman is silent about a power density for a heater bag for bakery products such as recited in the independent claims.

Regarding Barnett, it has previously been explained that Barnett does not relate to the same field of endeavor of heating bags. Claim 15 recites a heating bag which raises the temperature of a product from an ambient temperature to a range of 36°C - 44°C. In contrast, Barnett discloses an electrical heating pad with an electrical heating element and a woolen panel for the purpose of abstracting moisture from the surrounding air and then applying a moist heat to the body of the user of the pad, thus bringing a therapeutic value. Barnett does not aim at heating an item such as a bakery product (or even a human body for that matter) from an ambient temperature to a temperature included within the

range of 36°C - 44°C. In this respect it is noted that a human body is already at a normal temperature of 37°C. Thus, Barnett is clearly not directed to heating (raising the temperature of) a human body, and by extension is also not directed to heating an object such as a bakery product.

As alluded to in the Office Action, Barnett teaches the use of wool for its property of accumulating moisture, which is exploited to generate the desired moist heat applied to a user of the heating pad. The Office Action states that it would be obvious based on this teaching to use wool in the device of Forrester because it will absorb extra gas/vapor from the heating bag and keep the item (e.g. pizza) from getting undesired sogginess. It is respectfully submitted that this analysis is incorrect. The last thing that Forrester would want is the accumulation of moisture in a material of the container, which would retard the escape of moisture from the container and thus lead to the very problems Forrester is trying to solve. Forrester employs vapor-permeable materials such as nylon that do not accumulate appreciable moisture, but rather permit moisture to pass through them to the external environment, away from the product. The use of a wool panel in a heating pad per Barnett, which is specifically to accumulate moisture locally to apply a moist heat a human body, in no way motivates any use of such a panel in the container of Forrester in which the purpose is to promote full escape of moisture away from the container and the product it contains.

Based on the foregoing, it is respectfully submitted that the combination of Forrester, Kochman and Barnett cannot render claim 15 obvious under 35 U.S.C. § 103. In particular, this combination of references does not teach a heating bag for a bakery product having all the elements of claim 15. Forrester shows only a container bag used to maintain temperature, which has no teaching of the specific heating power density nor the natural materials of claim 15. Kochman and Barnett do not make up for these deficiencies. Kochman teaches only the ability to achieve different levels of heating power in an arrangement of heating cables, with no teaching of a use in a heating bag nor of the particular heating power density of claim 15. And Barnett's teaching of a wool panel in a heating

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pad is, if anything, entirely inconsistent with the purpose of Forrester to promote rapid escape of moisture away from the container, and thus Barnett in no way suggests replacing the vapor-permeable materials (such as nylon) of Forrester with wool. Because this combination of references fails to teach the entirety of claim 15, it cannot render claim 15 obvious under 35 U.S.C. § 103(a).

New claims 29 to 31 are added which cover a variant embodiment of the invention and respectively correspond to claims 15, 21 and 28.

In view of the amendments and remarks herein, it is respectfully urged that all the claims of this application are allowable over the art of record, and that the application is therefore allowable. Favorable action is respectfully requested.

Respectfully submitted,

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